What is claimed is:

1.  A film comprising IrMnN having a (200) texture.

2.  The film of Claim 1, wherein the IrMnN comprises from about 2 to about 78 atomic percent Ir, and from about 16 to about 96 atomic percent Mn.

3.  The film of Claim 1, wherein the IrMnN comprises from about 14 to about 23 atomic percent Ir, and from about 69 to about 83 atomic percent Mn.

4.  The film of Claim 1, wherein the IrMnN comprises from about 1 to about 20 atomic percent N.

5.  The film of Claim 1, wherein the IrMnN comprises from about 2 to about 10 atomic percent N.

6.  The film of Claim 1, wherein the film has thickness of from about 5 to about 20 nm.

7.  The film of Claim 1, wherein the film is an exchange biasing layer.

8.  The film of Claim 1, wherein the film is a seed layer.

9.  A layered magnetic structure comprising:

    an IrMnN layer; and

    a ferromagnetic layer deposited on the IrMnN layer.

10. The layered magnetic structure of Claim 9, wherein the IrMnN layer comprises a (200) texture.

11. The layered magnetic structure of Claim 9, wherein the IrMnN comprises from about 2 to about 78 atomic percent Ir, and from about 16 to about 96 atomic percent Mn.

12. The layered magnetic structure of Claim 9, wherein the IrMnN comprises from about 1 to about 20 atomic percent N.

13. The layered magnetic structure of Claim 9, wherein the film has thickness of from about 5 to about 20 nm.

14. The layered magnetic structure of Claim 9, wherein the structure comprises a plurality of the IrMnN layers.

15. The layered magnetic structure of Claim 9, wherein the structure comprises a plurality of the ferromagnetic layers.

16. The layered magnetic structure of Claim 9, wherein the structure comprises from 2 to 40 of the IrMnN layers, and from 2 to 40 of the ferromagnetic layers.

17. The layered magnetic structure of Claim 9, wherein the IrMnN layer is a seed layer for the ferromagnetic layer.

18. The layered magnetic structure of Claim 9, wherein the IrMnN and ferromagnetic layers are exchange coupled.

19. The layered magnetic structure of Claim 9, wherein the IrMnN seed layer is deposited on a substrate.

20. A soft magnetic underlayer of a perpendicular magnetic recording media comprising the layered magnetic structure of Claim 9.

21. A spin valve sensor including a pinning layer comprising the layered magnetic structure of Claim 9.

22. A method of making an IrMnN film comprising depositing Ir and Mn on a substrate in the presence of a reactive nitrogen-containing atmosphere.

23. The method of Claim 22, wherein the reactive nitrogen-containing atmosphere comprises from about 1 to about 50 volume percent $N_2$.

24. The method of Claim 22, wherein the reactive nitrogen-containing atmosphere comprises from about 2 to about 20 volume percent $N_2$.

25. The method of Claim 23, wherein the nitrogen-containing atmosphere comprises from about 50 to about 99 volume percent of at least one inert gas.

26. The method of Claim 25, wherein the inert gas comprises argon.

27. The method of Claim 22, wherein the nitrogen-containing atmosphere is at room temperature.

28. The method of Claim 22, wherein the IrMnN film is deposited by reactive sputtering.

29. The method of Claim 28, wherein the Ir and Mn are provided in elemental form.

30. The method of Claim 28, wherein the Ir and Mn are provided as an alloy.

31. The method of Claim 30, wherein the alloy comprises from about 2 to about 78 atomic percent Ir, and from about 16 to about 96 atomic percent Mn.

32. The method of Claim 22, wherein the IrMnN film has a (200) texture.

33. A method of making an IrMnN film comprising depositing the IrMnN film on a substrate, wherein the IrMnN film has a (200) texture.

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34.     A method of making a layered magnetic structure comprising:

providing an IrMnN layer; and

depositing a ferromagnetic layer on the IrMnN layer.

35.     The method of Claim 34, wherein the IrMnN has a (200) texture.

36.     The method of Claim 34, wherein the IrMnN layer is a seed layer for the ferromagnetic layer.

37.     The method of Claim 34, wherein the IrMnN and ferromagnetic layers are exchange coupled.